What Is Claimed Is:

1. A USB interface, comprising:
a test signal generator for generating a test signal;
a signal sampling device coupled to the test signal generator for sampling the test signal and outputting the sampled test signal after a predetermined time;
a transmitter and a receiver coupled to a signal for accessing data at transmission terminals;
a USB transceiver macrocell coupled to the test signal generator, the transmitter, and receiver, the USB transceiver macrocell for converting the test signal with USB protocol, outputting a first converted signal through the transmitter, receiving the first converted signal through the transmission terminals and the receiver, and converting the received first converted signal to a second converted signal; and
a comparator coupled to the USB transceiver macrocell and the signal sampling device for comparing the second converted signal with the sampled test signal, and outputting an error-acknowledging signal.

2. The USB interface as claimed in claim 1, wherein the predetermined time is set according to the USB protocol implanted by the USB transceiver macrocell.

3. The USB interface as claimed in claim 1, wherein the signal sampling device further comprising:
a memory for storing the test signal; and
a delay device for delaying the test signal for the predetermined time, and outputting the test signal from the memory.

4. The USB interface as claimed in claim 1, wherein the test signal and the second converted signal are parallel signals.

5. The USB interface as claimed in claim 4, wherein the first converted signal is a serial signal.

6. The USB interface as claimed in claim 5, wherein the USB transceiver macrocell converts the parallel test signal to the serial first converted signal, and converts the first converted signal received by the receiver to the parallel second converted signal.

7. The USB interface as claimed in claim 1, wherein the comparator further comprises an enable terminal and is enabled when the enable terminal receives a testing enable signal representing the test of the physical layer of the USB interface is performed.

8. The USB interface as claimed in claim 7, further comprising a serial interface engine coupled to the USB transceiver macrocell containing a USB packet ID and address recognition logic, sequencing and state machine logic to handle USB packets and transactions.

9. The USB interface as claimed in claim 8, wherein the testing enable signal is output by the serial interface engine or controlled externally from USB transceiver macrocell.

10. A testing method for a USB interface, comprising the following steps:

providing a test signal to a USB transceiver macrocell;

sampling the test signal and outputting the test signal after a predetermined time;

converting the test signal to USB protocol, outputting a first converted signal through a transmitter, receiving the first converted signal through a receiver, and converting the received first converted signal to a second converted signal; and

comparing the second converted signal with the test signal and then outputting an error-acknowledging signal.

11. The testing method of claim 10, wherein the predetermined time is set according to the USB protocol implanted by the USB transceiver macrocell.

12. The testing method of claim 10, wherein the test signal and the second converted signal are parallel signals.

13. The testing method of claim 12, wherein the first converted signal is a serial signal.

14. The testing method of claim 13, wherein the USB transceiver macrocell converts the parallel test signal to the serial first converted signal, and converts the first converted signal received by the receiver to the parallel second converted signal.

15. A testing method for a USB transceiver macrocell, comprising the following steps:

providing a test signal to the USB transceiver macrocell;

sampling the test signal and outputting the test signal after a predetermined time;

converting the test signal with a USB protocol and outputting a converted signal by the USB transceiver macrocell; and

comparing the converted signal with the test signal and then outputting an error-acknowledging signal.

16. The testing method of claim 15, wherein the predetermined time is set according to the USB protocol implanted by the USB transceiver macrocell.

17. A USB interface, comprising:

a test signal generator for generating a test signal;

delay logic for delaying the test signal;

a USB converter logic coupled to the test signal generator, the USB converter logic including logic for converting the test signal into a USB protocol signal,

circuitry for receiving the USB protocol signal and looping the signal back to the USB converter logic;

logic within the USB converter circuit for converting the loop-backed signal into a loop-backed converted signal having a protocol comparable to the test signal; and

a comparator coupled to the USB converter circuit, the comparator configured to compare the loop-backed converted signal with the delayed test signal.

18. A testing method for a USB transceiver, comprising:

providing a test signal to a USB signal converter;

sampling the test signal and outputting the test signal after a predetermined time;

converting the test signal with a USB protocol and outputting a converted signal by the USB signal converter; and

comparing the converted signal with the test signal and then outputting an error-acknowledging signal.